Business Applications Programming

Assignment 2 (20%)

Please complete the following exercise and submit your solution online by Monday 16th October @ 5 pm at the latest. Your submission document (word format) should follow the general guidelines as detailed under the Assignment tab in the course module on Blackboard. **Note** maximum of **6** screenshots per assignment submission.

Create a well-designed application for Halo Fitness, a company that runs health & fitness programs. The purpose of your application is to enable their sales team to generate pricing and process bookings for their programs. Halo currently provides the following range of health & fitness programs along with pricing per session per program type (Table 1).

Programs	Price Per Session
Circuit Training	€25
Pilates	€40
High-intensity interval training	€25
Aerobics	€25
Fitness Boot Camp	€20
Weigh Training	€25
Agility	€50
Yoga	€35
Speed Training	€45

Table 1: Programs & Price per Session Fees

Halo's pricing is based on session bundles with discounts applied based on number of sessions purchased shown below (Table 2)

Number of Sessions	Bundle Discount
1	0%
3	5%
5	10%
7	15%
10	20%
12	30%

Halo Fitness

Table 2: Bundles with Discounts

Halo offers the following optional upgrades which can be purchased at the time of booking, one to one training for an additional €25 per session, small group training for an additional €15 per session, and medium group training for an additional €5 per session. (Number of session discounts applies)

The company provides its attendees with a Halo sport cap drinking bottle at the beginning of their program free of charge, however if the attendee wishes to have the bottle personalized with their name or initials there is an additional charge of €7.99.

Finally, Halos offers a group discount of 7.5% discount to customers who book fitness programs for 4 or more participants and who also purchase one of the three upgrade options.

Basic Flow of Events

To generate a price/ quote for a prospective customer(s), the user selects the program which the client has expressed an interest in, the number of sessions for they are considering to take for that program, and how many participant(s) may wish to take part. Potential customers are also offered the session upgrade option and asked whether the participant(s) might wish to personalize their free sports water bottle for a small charge. When the user clicks the '*Display*' button, the application displays the full details of the chosen program and any options chosen along with the program bundle cost, any upgrade costs, and the overall cost of the program.

If the prospective customer wishes to proceed, the user clicks the '*Book*' button, after which a MessageBox with a formatted message confirming the completion of the booking is displayed. This confirmation message contains the name and duration of the program booked along with total cost. Note: payment is processed separately from the application.

If the user wishes to check how many bookings have been processed, they can click the '*Summary*' button and the application displays the total value of program bookings processed, the total value of options chosen, the number of bookings that availed of the group discount, and the average revenue achieved per booking.

Design Notes

Follow principles of good design.

Handle any exceptions that could occur in your project & provide user input validation as needed.

The project contains a **single** form, and you are required to include the following controls in its design - Radio Buttons, Check Box(s) & List Boxes. Include *Display*, *Book, Summary, Clear,* and *Exit* buttons. Include ToolTips & Access keys as appropriate.

Use of any collection (list, array etc.) including list view, data grid controls, along with any database is **strictly prohibited**.

Students are expected to complete this assignment using the content from section 2, 3 & 4 of the course.